

CLEVELAND-CLIFFS INC.

United Taconite LLC PO Box 180, Eveleth, MN 55734 P 218.744.7800 clevelandcliffs.com

July 29, 2021

Air and Radiation Division U.S. Environmental Protection Agency Region 5 (A-18J) 77 West Jackson Boulevard Chicago, IL 60604

Re: United Taconite LLC - Fairlane Plant

Regional Haze FIP Semiannual Compliance Report

Required by 40 CFR § 53.1235(e)(5)

Dear Sir or Madam:

As required by 40 CFR § 52.1235 [2016 Revision to 2013 Taconite Federal Implementation Plan Establishing BART for Taconite Plants (FIP)], the following is the semiannual compliance report as required by the FIP for United Taconite LLC (United) for the period of January 1– June 30, 2021. The potential deviations and downtime noted herein are not necessarily violations of the applicable requirements. The facility preserves the right to use credible evidence to demonstrate compliance with all applicable requirements applicable during this reporting period.

Process Units, Control Devices, and CEMS Covered by this Report

United operates two indurating furnaces - Furnace Line 1 (EU040 / EQUI 45) and Furnace Line 2 (EU042 / EQUI 47). Furnace Line 1 is controlled by one wet scrubber, while Furnace Line 2 is controlled by two wet scrubbers. These scrubbers control particulate emissions from the furnace lines and are also considered low efficiency SO₂ control. In January 2017, United installed low NOx burner technology on Furnace Line 1. Burner construction, installation, and startup notifications were made in accordance to 40 C.F.R. 52.1235(b)(1)(iv). Problems associated with the Line 1 low NO_x burner technology forced United to postpone the scheduled installation on Line 2. United has engaged with US EPA to reassess what constitutes best available retrofit technology for Line 1 and Line 2 in light of these problems. A proposed resolution is pending EPA approval.

The following table summarizes the equipment covered by this report.

Emission Unit (EU) EQUI	Stack Vent (SV)/STRU	Control Devices	Monitor (MR) EQUI	Manufacturer/Model	Serial #	Pollutant
Line 1 Furnace (EU040) EQUI 45	(SV046) STRU 53	Venturi Wet Scrubber (CE056)	(MR001) EQUI 142	Sick-Maihak/GM-32	17238033	NO_x
			(MR002) EQUI 143	Sick-Maihak/GM-32	17238033	SO ₂
Line 2 Furnace (EU 042) EQUI 47	Line 2A Waste Gas (SV048) STRU 16	Venturi Rod Deck Wet Scrubber (CE050)	(MR004) EQUI 145	Sick-Maihak/GM-32	17238034	NO _x
			(MR005) EQUI 146	Sick-Maihak/GM-32	17238034	SO ₂
Line 2 Furnace (EU 042) EQUI 47	Line 2B Waste Gas (SV049) STRU 15	Venturi Rod Deck Wet Scrubber (CE049)	(MR007) EQUI 148	Sick-Maihak/GM-32	17238035	NO_x
			(MR008) EQUI 149	Sick-Maihak/GM-32	17238035	SO_2

Startup, Shutdown, and Malfunction (SSM) Reporting

Furnace startup, shutdown, and malfunction events for this period are reported quarterly as monitor bypass in the DRF-1 forms found in the 2021 Q1 and Q2 CEMS Excess Emission Reports (EER) submitted to EPA. All actions taken with the reported events were consistent with United's SSM plan. In addition, no SSM events related to the process scrubbers occurred during this period.

Other Reporting

As reported in the 2021 Q1 and Q2 CEMS EER submitted to EPA, United had no reported deviations to the aggregate limit of 529.0 lbs SO₂/hr based on a 30-day rolling average for Furnace Line 1 and Line 2. United maintained its compliance with the 1.5% coal sulfur limit on both furnace lines.

As required, United conducted a Relative Accuracy Test Audit (RATA) during the 3rd quarter of 2020 and a Calibration Gas Audit (CGA) during the 1st and 2nd Quarter of 2021. It should be noted that although a passing CGA was completed during Q2 2021 on EQUI 142/143 and EQUI 145/146, EQUI 148/149 was unable to successfully complete a passing CGA. The issue was diagnosed as a faulty electronic board and after successful replacement a passing CGA was completed for EQUI 148/149 on July 10, 2021.

Please contact Michael Bonham Environmental Coordinator, at (218) 744-7840 or at michael.bonham@clevelandcliffs.com if you have questions about this submittal or require additional information.

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Certification

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Sincerely,

Nick Beukema

General Manager, United Taconite LLC

Cc: Candice Maxwell (United)